1636

1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/155,327F

DATE: 01/21/2003
TIME: 12:26:16

Input Set : N:\Crf4\01172003\I155327G.raw
Output Set: N:\CRF4\01212003\I155327F.raw

```
      1 <110> APPLICANT: AMRAD Operations Pty Ltd
      2 <120> TITLE OF INVENTION: A NOVEL MAMMALIAN GENE, bcl-2, BELONGS TO THE bcl-2
      3       FAMILY OF APOPTOSIS-CONTROLLING GENES
      4 <130> FILE REFERENCE: 2096584
C-->  5 <140> CURRENT APPLICATION NUMBER: US/09/155,327F
C-->  6 <141> CURRENT FILING DATE: 1996-03-27
      7 <150> PRIOR APPLICATION NUMBER: PN8965
      8 <151> PRIOR FILING DATE: 1996-03-27
      9 <160> NUMBER OF SEQ ID NOS: 15
     10 <170> SOFTWARE: PatentIn Ver. 2.1
     12 <210> SEQ ID NO: 1
     13 <211> LENGTH: 33
     14 <212> TYPE: DNA
     15 <213> ORGANISM: Mouse
     16 <220> FEATURE:
     17 <221> NAME/KEY: modified_base
     18 <222> LOCATION: 16
     19 <223> OTHER INFORMATION: n is inosine
     20 <220> FEATURE:
     21 <221> NAME/KEY: modified_base
     22 <222> LOCATION: 19
     23 <223> OTHER INFORMATION: n is inosine
     24 <220> FEATURE:
     25 <221> NAME/KEY: modified_base .
     26 <222> LOCATION: 22
     27 <223> OTHER INFORMATION: n is inosine
     28 <220> FEATURE:
     29 <221> NAME/KEY: modified_base
     30 <222> LOCATION: 25
     31 <223> OTHER INFORMATION: n is inosine
     32 <400> SEQUENCE: 1
W--> 33       gctctagaac tggggnhgnr tngtngcctt ytt                              33
     35 <210> SEQ ID NO: 2
     36 <211> LENGTH: 9
     37 <212> TYPE: PRT
     38 <213> ORGANISM: Mouse
     39 <220> FEATURE:
     40 <221> NAME/KEY: Unsure
     41 <222> LOCATION: 5
     42 <223> OTHER INFORMATION: Xaa is Ile or Val
     43 <400> SEQUENCE: 2
W--> 44       Asn Trp Gly Arg Xaa Val Ala Phe Phe
     45         1               5
```

RAW SEQUENCE LISTING
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Input Set : N:\Crf4\01172003\I155327G.raw
Output Set: N:\CRF4\01212003\I155327F.raw

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    47 <210> SEQ ID NO: 3
    48 <211> LENGTH: 31
    49 <212> TYPE: DNA
    50 <213> ORGANISM: Mouse
    51 <220> FEATURE:
    52 <221> NAME/KEY: modified_base
    53 <222> LOCATION: 14
    54 <223> OTHER INFORMATION: n is inosine
    55 <220> FEATURE:
    56 <221> NAME/KEY: modified_base
    57 <222> LOCATION: 17
    58 <223> OTHER INFORMATION: n is inosine
    59 <220> FEATURE:
    60 <221> NAME/KEY: modified_base
    61 <222> LOCATION: 20
    62 <223> OTHER INFORMATION: n is inosine
    63 <400> SEQUENCE: 3                                                    31
W--> 64       ggaattccca gccnccntkn tcttggatcc a
    66 <210> SEQ ID NO: 4
    67 <211> LENGTH: 8
    68 <212> TYPE: PRT
    69 <213> ORGANISM: Mouse
    70 <220> FEATURE:
    71 <221> NAME/KEY: Unsure
    72 <222> LOCATION: 4
    73 <223> OTHER INFORMATION: Xaa is Asp or Glu
    74 <220> FEATURE:
    75 <221> NAME/KEY: Unsure
    76 <222> LOCATION: 5
    77 <223> OTHER INFORMATION: Xaa is Asn or Gln
    78 <400> SEQUENCE: 4
W--> 79       Trp Ile Gln Xaa Xaa Gly Gly Trp
    80          1               5
    82 <210> SEQ ID NO: 5
    83 <211> LENGTH: 14
    84 <212> TYPE: PRT
    85 <213> ORGANISM: Mouse
    86 <400> SEQUENCE: 5
    87       Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val
    88         1               5                   10
    90 <210> SEQ ID NO: 6
    91 <211> LENGTH: 583
    92 <212> TYPE: DNA
    93 <213> ORGANISM: HUMAN
    94 <220> FEATURE:
    95 <221> NAME/KEY: CDS
    96 <222> LOCATION: (1)..(579)
    97 <400> SEQUENCE: 6
    98       atg gcg acc cca gcc tcg gcc cca gac aca cgg gct ctg gtg gca gac   48
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/155,327F

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Input Set : N:\Crf4\01172003\I155327G.raw
Output Set: N:\CRF4\01212003\I155327F.raw

```
Met Ala Thr Pro Ala Ser Ala Pro Asp Thr Arg Ala Leu Val Ala Asp
  1               5                  10                  15
ttt gta ggt tat aag ctg agg cag aag ggt tat gtc tgt gga gct ggc   96
Phe Val Gly Tyr Lys Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
            20                  25                  30
ccc ggg gag ggc cca gca gct gac ccg ctg cac caa gcc atg cgg gca   144
Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
        35                  40                  45
gct gga gat gag ttc gag acc cgc ttc cgg cgc acc ttc tct gat ctg   192
Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
    50                  55                  60
gcg gct cag ctg cat gtg acc cca ggc tca gcc cag caa cgc ttc acc   240
Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
65                  70                  75                  80
cag gtc tcc gac gaa ctt ttt caa ggg ggc ccc aac tgg ggc cgc ctt   288
Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
                85                  90                  95
gta gcc ttc ttt gtc ttt ggg gct gca ctg tgt gct gag agt gtc aac   336
Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
            100                 105                 110
aag gag atg gaa cca ctg gtg gga caa gtg cag gag tgg atg gtg gcc   384
Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Glu Trp Met Val Ala
        115                 120                 125
tac ctg gag acg cgg ctg gct gac tgg atc cac agc agt ggg ggc tgg   432
Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
    130                 135                 140
gcg gag ttc aca gct cta tac ggg gac ggg gcc ctg gag gag gcg cgg   480
Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
145                 150                 155                 160
cgt ctg cgg gag ggg aac tgg gca tca gtg agg aca gtg ctg acg ggg   528
Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
                165                 170                 175
gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc   576
Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
            180                 185                 190
aag tgaa                                                         583
Lys
```

<210> SEQ ID NO: 7
<211> LENGTH: 193
<212> TYPE: PRT
<213> ORGANISM: HUMAN
<400> SEQUENCE: 7

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Met Ala Thr Pro Ala Ser Ala Pro Asp Thr Arg Ala Leu Val Ala Asp
  1               5                  10                  15
Phe Val Gly Tyr Lys Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
            20                  25                  30
Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
        35                  40                  45
Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/155,327F

DATE: 01/21/2003
TIME: 12:26:16

Input Set : N:\Crf4\01172003\I155327G.raw
Output Set: N:\CRF4\01212003\I155327F.raw

```
149          50                  55                  60
150       Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
151        65                  70                  75                  80
152       Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
153                        85                  90                  95
154       Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
155                   100                 105                 110
156       Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Glu Trp Met Val Ala
157               115                 120                 125
158       Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
159           130                 135                 140
160       Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
161       145                 150                 155                 160
162       Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
163                        165                 170                 175
164       Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
165                   180                 185                 190
166       Lys
168 <210> SEQ ID NO: 8
169 <211> LENGTH: 582
170 <212> TYPE: DNA
171 <213> ORGANISM: Mouse
172 <220> FEATURE:
173 <221> NAME/KEY: CDS
174 <222> LOCATION: (1)..(579)
175 <400> SEQUENCE: 8
176       atg gcg acc cca gcc tca acc cca gac aca cgg gct cta gtg gct gac   48
177       Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp
178         1               5                  10                  15
179       ttt gta ggc tat agg ctg agg cag aag ggt tat gtc tgt gga gct ggc   96
180       Phe Val Gly Tyr Arg Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
181                    20                  25                  30
182       cct ggg gaa ggc cca gcc gcc gac ccg ctg cac caa gcc atg cgg gct   144
183       Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
184                35                  40                  45
185       gct gga gac gag ttt gag acc cgt ttc cgc cgc acc ttc tct gac ctg   192
186       Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
187            50                  55                  60
188       gcc gct cag cta cac gtg acc cca ggc tca gcc cag caa cgc ttc acc   240
189       Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
190         65                  70                  75                  80
191       cag gtt tcc gac gaa ctt ttc caa ggg ggc cct aac tgg ggc cgt ctt   288
192       Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
193                        85                  90                  95
194       gtg gca ttc ttt gtc ttt ggg gct gcc ctg tgt gct gag agt gtc aac   336
195       Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
196                   100                 105                 110
197       aaa gaa atg gag cct ttg gtg gga caa gtg cag gat tgg atg gtg gcc   384
198       Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Asp Trp Met Val Ala
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/155,327F

DATE: 01/21/2003
TIME: 12:26:16

Input Set : N:\Crf4\01172003\I155327G.raw
Output Set: N:\CRF4\01212003\I155327F.raw

```
199                 115                 120                 125
200       tac ctg gag aca cgt ctg gct gac tgg atc cac agc agt ggc ggc tgg   432
201       Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
202           130                 135                 140
203       gcg gag ttc aca gct cta tac ggg gac ggg gcc ctg gag gag gca cgg   480
204       Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
205       145                 150                 155                 160
206       cgt ctg cgg gag ggg aac tgg gca tca gtg agg aca gtg ctg acg ggg   528
207       Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
208                       165                 170                 175
209       gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc   576
210       Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
211                   180                 185                 190
                                                                        582
212       aag tga
213       Lys
215 <210> SEQ ID NO: 9
216 <211> LENGTH: 193
217 <212> TYPE: PRT
218 <213> ORGANISM: Mouse
219 <400> SEQUENCE: 9
220       Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp
221         1               5                  10                  15
222       Phe Val Gly Tyr Arg Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
223                    20                  25                  30
224       Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
225                35                  40                  45
226       Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
227            50                  55                  60
228       Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
229         65                  70                  75                  80
230       Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
231                       85                  90                  95
232       Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
233                   100                 105                 110
234       Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Asp Trp Met Val Ala
235               115                 120                 125
236       Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
237           130                 135                 140
238       Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
239       145                 150                 155                 160
240       Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
241                       165                 170                 175
242       Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
243                   180                 185                 190
244       Lys
246 <210> SEQ ID NO: 10
247 <211> LENGTH: 333
248 <212> TYPE: PRT
249 <213> ORGANISM: murine
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/21/2003
PATENT APPLICATION: US/09/155,327F TIME: 12:26:17

Input Set : N:\Crf4\01172003\I155327G.raw
Output Set: N:\CRF4\01212003\I155327F.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 16,19,22,25
Seq#:2; Xaa Pos. 5
Seq#:3; N Pos. 14,17,20
Seq#:4; Xaa Pos. 4,5

VERIFICATION SUMMARY
PATENT APPLICATION: **US/09/155,327F**

DATE: 01/21/2003
TIME: 12:26:17

Input Set : **N:\Crf4\01172003\I155327G.raw**
Output Set: **N:\CRF4\01212003\I155327F.raw**

L:5 M:270 C: Current Application Number differs, Wrong Format
L:6 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:44 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0